


# “The impact of globalization challenges on pension provision development”

<b>AUTHORS</b>	Liliya Barannyk
<b>ARTICLE INFO</b>	Liliya Barannyk (2017). The impact of globalization challenges on pension provision development. <i>Geopolitics under Globalization</i> , 1(2), 34-44. doi: <a href="https://doi.org/10.21511/gg.01(2).2017.04">10.21511/gg.01(2).2017.04</a>
<b>DOI</b>	<a href="http://dx.doi.org/10.21511/gg.01(2).2017.04">http://dx.doi.org/10.21511/gg.01(2).2017.04</a>
<b>RELEASED ON</b>	Thursday, 28 December 2017
<b>RECEIVED ON</b>	Monday, 02 October 2017
<b>ACCEPTED ON</b>	Thursday, 14 December 2017
<b>LICENSE</b>	 This work is licensed under a <a href="https://creativecommons.org/licenses/by-nc/4.0/">Creative Commons Attribution-NonCommercial 4.0 International License</a>
<b>JOURNAL</b>	"Geopolitics under Globalization"
<b>ISSN PRINT</b>	2543-5493
<b>ISSN ONLINE</b>	2543-9820
<b>PUBLISHER</b>	LLC “Consulting Publishing Company “Business Perspectives”
<b>FOUNDER</b>	Sp. z o.o. Kozmenko Science Publishing



NUMBER OF REFERENCES

**33**



NUMBER OF FIGURES

**0**



NUMBER OF TABLES

**3**

© The author(s) 2023. This publication is an open access article.



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"  
Hryhorii Skovoroda lane, 10, Sumy,  
40022, Ukraine

[www.businessperspectives.org](http://www.businessperspectives.org)

**Received on:** 2<sup>nd</sup> of October, 2017

**Accepted on:** 14<sup>th</sup> of December, 2017

© Liliya Barannyk, 2017

Liliya Barannyk, Doctor of  
Economics, Professor, Head of  
Department of Taxation and Social  
Security, University of Customs and  
Finance, Ukraine.



This is an Open Access article,  
distributed under the terms of the  
[Creative Commons Attribution-Non-  
Commercial 4.0 International license](https://creativecommons.org/licenses/by-nc/4.0/),  
which permits re-use, distribution,  
and reproduction, provided the  
materials aren't used for commercial  
purposes and the original work is  
properly cited.

Liliya Barannyk (Ukraine)

# THE IMPACT OF GLOBALIZATION CHALLENGES ON PENSION PROVISION DEVELOPMENT

## Abstract

The article analyzes pension provision development in the world and the problems of its implementation under the globalization challenges. The main reasons for considering pension provision as a global problem are specified. It is noted that the negative manifestations of globalization are inherent in the Ukrainian practice of pension provision. The purpose of the paper is to study the world's experience in reforming national pension systems under increasing global negative trends. The research was conducted using the methods of scientific knowledge: comparison and generalization – to establish the essential differences in approaches to the globalization processes studying; analysis and synthesis – to identify regularities in economic development and their determination of social consequences; historical and logical, as well as statistical methods. The article considers some countries' experience in improving the practice of pension provision. It was established that pension reform was aimed at making the pension age most upon the individual achievements of an employee (pension insurance record, salary, deductions, other personal preferences). In most developed countries, pension funds are provided from three sources: state pension funds, corporate sector pensions and individual pensions received under a contract of personal voluntary pension accumulative insurance. Further development of the pension system in Ukraine should be provided due to the introduction of its second level. As a result of the study, it was found out that global challenges are problems that hinder the normal course of human development. They make a particular negative impact on pension provision. The search for methods to neutralize or mitigate the effects of global challenges has led many countries to introduce a three-tier pension system that involves funding from various sources.

## Keywords

globalization, trends, ageing of population, economic decline, pension burden, pension reform, three-tier pension system

## JEL Classification

F01, F20, H55, J11

## INTRODUCTION

The interest of scientists, politicians, and the public to the problems of pension provision both in the world and in Ukraine, is not accidental. It is attributed to a number of factors, including the growing trend of the modern society ageing; disproportion between economically active population and pensioners; unemployment, inefficient models of social protection for elderly people, highly active labor migration; economic downturns; an increase in local/global dichotomy uncertainty, which complicates the reforming national pension systems. These trends are global in nature and affect more or less all countries of the world. They have a negative impact, first of all, on the systems of social protection of the population in substantially all civilized states, especially on the pension provision for citizens. The way out of this situation was initially the practice of financing pensions and other social guarantees at the expense of state budgets. However, this approach does not work in favor of long-term sustainable development.

Currently, in most developed countries, an affordable model of pension provision is a three-tier pension system, based on several forms of pension payment financing. World experience suggests that after the introduction of such a system, some countries have made significant advances in the pension provision for their citizens, despite global challenges.

This experience is extremely useful for countries in transition, including Ukraine, which creates its own pension system, and where 30% of the country's population are retired. Ukraine is not isolated from globalization processes and is influenced by the same way as other countries. However, ageing of the population is not supported by significant changes in solving problems such as low fertility, labor outflows, and high mortality in working age, etc.

Unfortunately, the problem of poor pension provision is compounded by the internal political and economic crisis and the military conflict of geopolitical nature. Consequently, these points indicate the relevance of the studying the globalization trends impact on the effective pension provision.

## 1. LITERATURE REVIEW

Among the major research on the pension provision development the works of scientists for different periods should be noted. A classic of the genre is undoubtedly the report of the Rome Club scientists titled "Borders of Growth" and other works aimed at solving current problems by developing a new direction in their study, known as global modeling (Meadows et al., 1972).

Under the globalization challenges influence, many works are devoted to the functioning of pension systems in different countries. So, Whitehouse collected and systematized data on pension systems operating in 53 countries of the world (Whitehouse, 2008). Kotlikoff and Burns (2005) analyzed the deep structural deficiencies of modern pension provision systems in developed countries. By the sample of the United States, the authors show that in this one country alone, the fiscal gap – the difference between planned expenditures and government revenues – exceeds 51 trillion dollars. It threatens to cause not only great difficulties in providing a life worth living for senior citizens, but also a severe crisis of the international financial system, which will affect all countries without exception. The authors suggest a set of political measures that will, if not prevent the coming storm, at least mitigate its impact, as well as provide recommendations to ordinary citizens on the preservation of personal savings in a virtually inevitable financial crisis (Kotlikoff & Burns, 2005). The works of the famous American sociologist, Kohli, are devoted to the pension provision in

European countries in the second half of the 20<sup>th</sup> century (Kohli, 1986a, 1986b, 1987, 2007; Jacobs et al., 1991; Kohli & Arza, 2011).

The development of pension issues in many scientific studies is closely linked with the analysis of political and globalization processes (Pension Reform in Europe, n.d.). Gugushvili in his monograph summarizes the experience of the formation and development of pension systems in 23 countries of Central and Eastern Europe, the independent states that arose in the territory of the former USSR in 1989–1997. The author concluded that in these countries, economic indicators, change in demographic background, internal political struggle, and external influence became the main reasons for the transformation of pension system models.

Surhone, Russell, Kaplan, and Hannon examined the legislative basis of pension provision in China, India, Brazil, and described the investment processes of pension savings, the relationship between enterprises and trade unions, considered the mechanisms that allowed pension systems to survive economic cataclysms (Akbulatov, 2013).

Issues of pension provision in the context of social and economic development of Ukraine after gaining state sovereignty are researched in the works of domestic scientists and practitioners, namely Vasilik, Zaychuk, Libanova, Lunina, Makarova, Nadtochii, Polozenko, Rippa, Skurativskyi, Tkachenko, Tolubiak, Tropina, Chugunov, Yurii, Yakymova and others. It is worth noting a number of authors and their work.

Rippa is among the scientists who are successfully working in the context of the designated topics and whose research is devoted to public pension system in Ukraine and foreign experience in pension systems modernization, including the processes of reforming pension systems in countries with developed and transition economies, existing and future models of combined pension systems: modernized solidary, cumulative and private, that are more financially stable under the demographic and economic changes (Rippa, 2007, 2017).

Of particular interest is the article by Kukuza, who analyzed the background to the emergence of a pension collapse in Ukraine, the origins of common myths and causes of dissatisfaction of the population, and also examined the issues of social security in the context of the country's macroeconomic indicators (Kukuza, 2016).

Tkachenko, the leading researcher at the Institute of Demography and Social Studies named after Ptukha of the National Academy of Sciences of Ukraine considers the pension provision in the context of both internal and external challenges for many years (Tkachenko, 2016, 2017).

Paying due attention to the contribution of the mentioned scientists to the problem, we note that under the dynamic globalization processes it is difficult to solve the problem of the pension provision financing, therefore pension schemes are often reviewed. The solution of the problem often consists in the implementation of a complex of reforms.

## 2. METHODS

The research is based on the methodology of the post non-classical paradigm as a definite general scientific global picture using the methods of scientific knowledge: comparison, generalization – when establishing the essential differences in approaches to the study of globalization processes; coordination; analysis and synthesis – in identifying trends and regularities in economic development and their determination of social consequences; methods of scientific proof: deduction and induction – to formulate conclusions; the method of logical and historical approach – to draw temporary and spatial parallels.

This approach allows us to consider the society, its individual forms of organization, in particular pension provision, as an open non-equilibrium system that, under the influence of negative global trends, can rebuild its organization in such a way that its further development will become successful.

The purpose of the paper is to study the experience of different countries in reforming national pension systems under the strengthening of negative globalization tendencies and to substantiate proposals on modernization of the pension system in Ukraine. In order to achieve this purpose, the article provides for the following tasks: to analyze and systematize the experience of some countries in improving the practice of pension provision, to establish the most acceptable elements of foreign pension reforms for Ukraine, and to formulate proposals on the main ways of the pension system further development.

## 3. RESULTS

Pension systems began to appear massively in Europe and its colonies in the late 19<sup>th</sup> – early 20<sup>th</sup> centuries. Historically, the first publicly-organized pension system (hereinafter referred to as PS) was introduced in Germany. In 1889, the Reichstag adopted a law on retirement benefits according to age or disability. Soon, other European countries introduced old-age insurance and passed a number of laws on social protection of the population (Antropov, 2006; Tserkasevich, 2002). At that time, the revolutionary events in the countries of Western Europe in the second half of the 19<sup>th</sup> century were the impetus of social reforms. In some countries, insurance was called “in case of illness”, and health laws were adopted separately in different regions. Social insurance, 8-hour working day, paid leave, extended trade union rights, etc. were introduced. A characteristic feature of the German approach was that social insurance was compulsory and based on contributions paid by both employers and workers. The German system was based on the previous practice of voluntary mutual funds, organized by guilds and labor unions. The pension rights in the new system were based on previously paid contributions.

Denmark (1891) and New Zealand (1898) introduced a “system of retirement” focused on targeted assistance to the poor, it was funded by general tax fees, provided for a scrutiny of needs and it guaranteed insignificant levels of payments. These pension systems are more likely to derive from traditional laws on the poor (Haidar, 2004). The system of pension insurance was introduced as a mechanism that guarantees substantive possibility in case of living into the non-working age.

In the first half of the 20<sup>th</sup> century, many countries have created national pension systems based on the principle of solidarity between generations, and in the second half of the 20<sup>th</sup> century they also passed the laws on the minimum guaranteed income. Despite all this, the civilized world still tries to organize the system of social protection of the elderly properly, though the reasons are already hidden in another.

First of all, these are negative demographic processes. At the beginning of the 21<sup>st</sup> century, practically the whole industrialized world has shown a birth rate below the estimated level required for a simple reproduction of the population – 2.1 children per woman at procreative age. In 2000, the world’s population was 6.03 billion people (which is 4.4 billion more than in 1930, and 2.5 billion more than in 1950), in 2010 – 6.7 billion people. According to experts, by 2050, the population of the planet will reach 9.3 billion, and then stabilize at 10.5-11.0 billion people. Demographic processes are at an uneven pace. The slowdown in the growth rate of the planet’s population is expected to be 0.9% on average per year. In developed countries, average annual growth rates will drop to 0.36%, compared to 0.6% over the past 25 years. In developing countries, the population will grow by 18%, an average of 1.1% per year. However, in some of these countries, low living standards and a lack of health care systems, high mortality and some others are critical demographic factors that slow down their development (Dynkin, 2007; Bilorus, 2002).

Increasing the standard of living of people in economically developed countries has led to an increase in life expectancy and a decline in fertility. Active migration processes also had some negative consequences, which resulted in a significant reduction in the number of workers in

some European countries, and an increase in the burden on the working part of the population. It turned out that the solidarity system of pension provision is too dependent on demographic problems and is not able to solve the entire complex of urgent socio-economic problems. The changes in the demographic structure of European countries at the end of the 20<sup>th</sup> century in the direction of an increase in the proportion of people over the age of 65 in the total population forced the governments of these countries to significantly increase public expenditures for social needs and pension provision (Tanzi & Schuknecht, 2000; Natali, 2008).

In addition, measures have been taken to stimulate the birth rate by providing more material assistance to families at the birth of a child; increase in leave due to pregnancy and childbirth; introduction of social security for migrants, refugees, people with disabilities in the national systems of social protection of the population (hereinafter referred to as the SPP); attracting foreign skilled workers to the country. In Germany alone, from 1960 to 1973, their number increased from 686 thousand to 2.6 million people (Karachurina, 2009).

By the start of the World War II, almost all industrialized countries had pension systems, some of them were limited according to the proportion of the population covered by pension protection. The decades after the World War II were a time of unprecedented expansion of the level of pension payments coverage in most developed countries. However, active subsidization of the PS from the state budget took funds from other sectors of the economy, which hindered the country’s development. So at the end of the 20<sup>th</sup> century, pension reforms have begun in almost all countries of the world. Their goal was to create a national pension system that would take into account economic, political and socio-demographic changes in their own countries and in the world as a whole. Those countries that timely found the problems and estimated the implications for the state budgets began pension reforms to find new sources of funding and new organizational and legal principles.

Pension system reforming occurred as a modernization of the distribution pension system without the introduction of accumulative principles; im-

**Table 1.** Three-tier pension system and its characteristics

Source: Compiled by the author.

<b>I Tier</b>	<p>OBLIGATORY PENSION INSURANCE (Distribution system) Obligatory according to the pattern of citizen participation. Realization principle – social insurance and solidarity between generations. Kinds of pensions – labor (according to age); social (due to loss of breadwinner, having no right to a pension, disability due to general illness). Performer – State Pension Fund.</p>
<b>II Tier</b>	<p>ACCUMULATIVE PENSION INSURANCE (Accumulation system) Obligatory according to the pattern of citizen participation. Realization principles – forming pension savings on personal accounts and financing expenditures for insurance contract payments. Kinds of pensions – additional to the basic pension (according to age): life pension of a fixed period; life determined pension; life pension for wedded pair; one-off payment. Performer – State Saving Fund.</p>
<b>III Tier</b>	<p>NON-GOVERNMENTAL PENSIONS (Accumulation system) Voluntary according to the pattern of citizen participation. Realization principle – forming pension savings on personal accounts and financing expenditures for contract payments. Kinds of pensions – pension benefits under conditions stipulated by the law on non-state pension provision. Performers – non-government pension funds, insurance companies, and banks</p>

plementation of transition to cumulative schemes and a sharp restriction in this distribution sector; as well as the adoption of a variant that combines distribution and accumulation principles. The third variant was chosen by the majority of both developed and developing countries. It is based on the introduction of an individual accounts system with obligatory and voluntary contributions. The latter is called the accumulative pension system, since it is based on the capitalization of contributions for the future retirement.

The world experience of pension reform has shown that a cumulative system is more acceptable, since it contributes to an increase in aggregate national savings, and hence to economic growth; does not depend on demographic risks, which jeopardize the development of the distribution system; provides a sufficient level of pensions differentiation depending on earnings and the efficiency of using retirement savings (Ivanova & Sidornia, 2014). In theory, the liberal model of social policy has prevailed, which is based on the subsidiarity and self-financing principles, in other words it is the economic doctrine of minimal state interference in the social sphere.

Many countries have introduced a three-tier pension system, with three financial schemes (or tiers): I Tier is financing of pensions from state pension funds; II Tier – from the state accumulative pension fund; and III Tier is non-state pension provision, which involves financing from different sources (Table 1).

That is, these countries have maintained a public distribution system with the simultaneous encouragement of voluntary private pension schemes. In essence, the reform of the PS was aimed at ensuring that the retirement age depended as much as possible on the individual achievements of the employee (insurance period, salary, deductions, and other personal preferences). At present, in most developed countries, citizens' pension benefits come from three sources: state pension funds, corporate sector pensions, and individual pensions received under a voluntary pension accumulation insurance contract. In percentage terms, it is about equal proportions. In many countries, pension provision is mostly provided by non-state pension funds (hereinafter referred to as NPFs) and life insurance companies. Thus, citizens prefer the mechanism of pension insurance to form pensions. In each country, the pension system has its own peculiarities related to the specifics of that SPP model, which has been formed over a decade. Therefore, in some countries, NPFs are preferred, in others – insurance companies or individual programs of saving for the old age. Insurance companies are the main providers of services that allow accumulating the necessary funds upon reaching retirement age. This is explained, first of all, by the peculiarities of taxation of contributions and payments under supplementary pension insurance contracts, which allow either the total or partial exclusion from the tax base of the abovementioned funds. And due to the fact that states are taking less and less part in guaranteeing

the preservation of significant income after retirement, in essence, insurance companies are no alternative to the savings.

Despite the fact that the amount of accumulated assets in NPFs and insurance companies in the developed EU countries is quite significant, they need to allocate additional 456 billion euros in order to preserve the current sizes of state pensions in the next 35 years. Already, the pension burden is 10.4% of GDP in the fifteen EU countries. In 2040, it will increase to 13.6%. In this regard, the European Commission recommends that EU member states continue to reform pension systems in order to minimize the negative effects of aging and population reduction.

According to the Organization for Economic Cooperation and Development (OECD), in 2013–2015, 26 of 34 countries have made changes to their pension systems. In nine countries, the majority of the population was involved in the reform, while other changes affected certain groups of employees (for example, private or public sectors) or pensioners themselves.

But the population continues to grow old. The proportion of the population over 65 years old to the engaged people in the world will be doubled by 2050. This will overload the pension systems and employees who finance their pensions by their work and taxes. The continuation of reforms is inevitable. The question arises as to how and when the countries of the world will carry out this reform. This affects not only the fairness to current and future pensioners, but also the state of the economy, both national and world (Tuladkhar et al., 2011).

There are three ways to reduce government spending for pensions: raising the retirement age, reducing retirement payments and benefits, and raising taxes.

Solidarity reforms are usually aimed at reducing pension payment. This increases the need to develop private pension provision and its role in future retirement income.

All OECD countries have accumulative pension systems. On average, in 34 countries, the distributive part provides pension in a 41% average salary,

with the accruals being increased to 58%, that is, about one third of the pension is provided by savings (Kuvshynova, 2016).

In general, measures taken by the OECD countries are aimed at reducing retirement expenditures and at parametric reforms. For example, the Czech Republic and Finland reduced indexation, France changed its order, Greece and Belgium froze it. Since 2017, Slovakia tied indexation to inflation (earlier – to inflation rates and wage growth), Sweden, Finland, Portugal, and Germany applied the same rules. In Turkey, indexation depends on GDP rates. Luxembourg indexes pensions only if pension income exceeds costs.

Some recent political reforms were aimed at delaying retirement. Komp is convinced that such a delay is important, since aging populations create the need for financially sound pension schemes and require a large amount of workforce. “However, pension reforms not only affect the way people retire, but also their retirement age. Moreover, the 2008 economic crisis has rebuilt labor markets, which has had an impact on retirement” (Komp, 2017).

The pension age is rising massively (see Table 2). By 2015, 30 out of 34 OECD countries have made an increase. Most countries have gone through a gradual increase in pension age.

In France, in 2010, an increase took place in the pension age from 60 to 62 years to 2018, to 2030 – to 67 years, and the minimum required period of payment of contributions will gradually be raised from the current 41.5 years to 43. Canada, Belgium, and Spain announced on the gradual increase in the retirement age to 67 years old, in Germany it raises from 65 to 67 per month in a year, in the Netherlands it will reach 67 years in 2021, and in Australia it will reach this number in 2023. In countries with economies in transition, where the retirement age was 60 years for men and 55 for women in the mid-1990s, it now stands at 65 and 63, respectively (Kuvshynova, 2016). Hungary increases the age from 62 to 65 years. In the Czech Republic they will retire at the age of 68. In Slovenia, where the retirement age is one of the lowest – 58, it raises to 60 for those who paid contributions for 40 years, if less – to 65.

**Table 2.** Pension age in some countries

Country	Pension age, years		Average life expectancy
	men	women	
Latvia	64	63	75
Greece	67	67	81,1
Ireland	66	66	81,5
Spain	65	65	80,1
Czech Republic	62	62	78.7
Japan	70	70	82.1
Denmark	67	67	78.3
Belgium	65	62	79.2
Norway	67	67	79.9
USA	65	65	78.1
Germany	67	67	79.3
Canada	65	65	81.2
Sweden	65	65	80.9
Switzerland	65	64	80.9
Great Britain	68	60	79.0
Italy	67	65	80.2
Poland	65	60	75.6
France	67	65	81
China	60	55	73
Georgia	65	60	76.7
Kazakhstan	63	58	68
Moldova	62	57	70.8
Ukraine	60	60	71.2

In the UK, a law was passed on raising the pension age to 66 years by 2020 and to 67 years by 2028. It is also planned to increase it to 68 by 2035 and to 69 by 2048. British officials expect an increase in pension age to 70 years will save 500 billion pounds over the next 50 years. In Ireland, the pension age is 66 years both for men and women, but the government intends to raise it to 67 years in 2021 and to 68 years in 2028.

According to the IMF, “the pension reform, aimed at the best positive long-term economic effects, is one that extends the able-bodied age of people” (Melbourne Mercer Global Index, 2017). It is possible to argue in this regard, but for countries with a long life expectancy this may be acceptable. As a matter of fact, many countries do the same in terms of life expectancy and a number of other social parameters.

Of course, an increase in the pension age will also result in an increase in the length of the period of service for a “full pension”. Many countries also take steps such as allowing retirees to work. For example, in the United Kingdom, the law prohib-

its an employer from dismissing an employee who has reached pension age if the latter does not want it and has the appropriate physical and intellectual form to perform his professional duties.

Many countries acted on the IMF advice, which follows the postulates of monetary economic theory, aimed at solving the problem of pension provision by methods such as raising the retirement age, reducing the replacement rate, and increasing the share of employees in the contributions to state pension funds. However, in parallel with this, conditions were created for the development of employees own initiative through participation in pension insurance and old-age savings programs.

If the government chooses reducing pensions and benefits (second scenario) for retirees, the benefits of this solution for the economy will not manifest itself immediately. At the first moment, the reduction of public spending will have a very tangible effect on aggregate demand.

The third scenario is the increase of tax and contribution rates, through which the state finances



**Table 3.** Top ten countries by Melbourne Mercer Global Index 2017

Source: Compiled based on Melbourne Mercer Global Index (2017).

Country	General index value	Sub-indices		
		compliance	stability	integrity
Denmark	78.9	76.5	79.8	81.3
Netherlands	78.8	78.0	73.5	87.5
Australia	77.1	75.3	73.0	85.7
Norway	74.7	77.0	61.0	90.3
Finland	72.3	70.2	61.3	91.0
Sweden	72.0	67.7	71.0	80.3
Singapore	69.4	65.2	66.2	80.7
Switzerland	67.6	60.2	64.7	83.3
New Zealand	67.4	66.2	61.5	77.8
Chile	67.3	58.0	69.1	79.7

the pension payments. In essence, this means raising the income tax rate. High taxes on employees' wages reduce their incomes, and hence costs and consumer demand. The increase of taxes leads to a decrease in the people's desire to work, to reducing the productive capacity of the economy, and to real GDP reduction.

Experts argue that the growth of insurance premiums has even a more negative short-term effect on GDP, rather than a reduction in pensions. In the US, for example, GDP will reduce by 0.7% to the tenth year after such a reform. We have even worse situation with long-term losses. In the Eurozone, in developing countries of Asia, and in other countries, this model has similar results (Tuladkhar et al., 2011).

An unprecedented measure is the unification of pension legislation for EU member states, which takes into account globalization trends and peculiarities of national pension practices. Despite their consensus on the fundamental approaches to the formation of pension policies, there are significant differences in its implementation in individual countries. This has been reflected in the strategies for ensuring the pension system development, which are determined by the state's attitude to the demographic problems and financial capacity of each country.

It should be noted that many countries have succeeded in reforming their pension provision. According to the Melbourne Mercer Global Index 2017 (Australian Center for Economic Research), Danish system is the best pension system. This

country has reached the highest level; its index is 78.9. The top ten countries index is presented in Table 3. In total, 25 countries have entered the rating. It takes into account both the state and private components of pension provision. The pension system is analyzed in terms of 50 indicators and three general categories: compliance with the needs of the population, stability, and integrity of the structure.

The result of Finland in the category of "integrity of the structure" was 91.0 points. Nevertheless, the Center provided a number of proposals for "refinement" of its PS, in particular, raising pensions for low-income pensioners, increasing accumulative pension deductions and improving the situation with employment of people of pre-retirement age, strengthening of state guarantees of pension provision of citizens in cases of pension fund fraud, poor management of their means or insolvency (Melbourne Mercer Global Index, 2017).

Improving pension provision in Ukraine is a top priority, so foreign experience is quite useful. However, in our opinion, the transfer of the pension burden to the employee alone is unacceptable; this may increase poverty among pensioners in the long run. After all, the pensions of most of our citizens are not high. In favor of raising the pension age for women, the following "argument" has worked: in Ukraine women after retirement live much longer than men. Moreover, the fact that a large number of Ukrainian women not only work, but also do a lot of work as housewives and bring up children was not taken into account.

In Ukraine, a situation has arisen, in which, in the medium term, fulfillment of state pension obligations is possible only due to state borrowing increase. Therefore, maintaining the sustainability of the state budget requires a change in the financial model of the Ukrainian pension system. After attainment of independence in Ukraine, efforts were made to reform the pension system in various years – the transition from pension provision to pension insurance (2004), raising the pension age and extending the minimum period of insurance to obtain a pension (2011), introducing new rules for the calculation of pensions, modernization of pension payments, etc. (2017). However, the process of creating an optimal model of financial support for PS is not over. The ultimate goal of pension reform is to ensure long-term macroeconomic and social stability in the state and improve the pensioners' well-being.

A comprehensive approach is needed to create the optimal conditions for the pension system functioning. This means that it is necessary to formu-

late its own domestic model of state regulation of the financial support for the pension system taking into account the peculiarities of the present stage of country development. It is appropriate to use instruments in the domestic practice of individual pension policy that have demonstrated their effectiveness, which will help create a sustainable and efficient mechanism for financing pensions in Ukraine, and raise the living standards of pensioners. First of all, it concerns the introduction of clear, consistent and fair rules for the formation of pensions, which will enable citizens to independently regulate their welfare both in working and in old age. A regular increase in pension age is not an effective means of solving the problem. A gradual transition to the introduction of a cumulative pension system on a voluntary basis should be initiated; benefits and early retirement should be abolished. Labor should be stimulated through salary and other benefits, and the pension should be secured first and foremost through its own efforts. It is the duty of the state to create all the necessary conditions for this.

---

## CONCLUSION

To conclude, global challenges are those hindering the normal course of human development, in particular, the ageing of the population; disproportion between economically active population and pensioners; unemployment, the ineffectiveness of most of the prevailing models of the elderly social protection, the very active migration of the labor force; economic downturn, etc., which complicate the task of states in reforming national pension systems. They have a particularly negative impact on the pension provision.

The search for methods to neutralize or mitigate the effects of global challenges has led many countries to introduce a three-tier pension system characterized by three financial schemes (tiers): the first tier is the financing of pensions from public pension funds; II tier – from the state accumulative pension fund; the third tier is non-state pension provision, which involves funding from various sources.

Many countries acted on the IMF advice, which adheres to the postulates of monetary economic theory, aimed at addressing the problem of pensions by raising the retirement age, reducing the replacement rate, and increasing the share of wage earners in paying contributions to state pension funds. At the same time, conditions were created for the development of employees own initiative through participation in programs of pension insurance and savings in old age. The general principles of modern pension provision are that the state undertakes to provide basic pensions or assistance in emergencies (loss of breadwinner, disability, etc.).

An unprecedented measure is the unification of pension legislation for EU member states, which takes into account globalization trends and peculiarities of national pension practices. Despite their consensus on the fundamental approaches to the formation of pension policies, there are significant differences in its implementation in individual countries. This was reflected in the strategies for ensuring the de-

velopment of pension system, which are determined by the state's attitude to the demographic problems and by financial capacity of each country.

Ukraine is also affected by globalization processes. The experience of developed countries in providing pension provision is extremely useful for countries in transition, including Ukraine, which creates its own domestic pension system. However, ageing of the population is not supported by significant changes in solving the problems such as low fertility, labor outflow, and high mortality in working age, etc.

The problem is exacerbated by internal political and economic crises and the military conflict of a geopolitical nature. Further studies of this problem as to Ukraine should focus on the study of an aspect of the pension system's transformation such as introducing, in parallel with changes in the pension system, the mandatory social medical insurance, introducing a second accumulation tier of the pension system initially on a voluntary basis, and justifying new approaches to reforming the pension system.

The study may be practically useful for the delivering of the academic courses "Pension System of Ukraine", "Global Economy", and some provisions may be taken into account by the Pension Fund of Ukraine in carrying out the social policy of the state.

## REFERENCES

1. Akbulatov, R. S. (2013). История становления и развития пенсионной системы Красноярского края в 90-е гг. XX – начало XXI в. [*Istoriya stanovleniya i razvitiya pensionnoy sistemy Krasnoyarskogo kraya v 90-e gg. XX v. – nachalo XXI v.*]. Thesis. Irkutsk.
2. Antropov, V. V. (2006). Социальная защита в странах Европейского Союза. История, организация, финансирование, проблемы [*Sotsyalnaya zashchita v stranakh Evropeyskogo Soyuza. Istoriya, organizatsiya, finansirovaniye, problemy*] (271 p.). Moscow: Izdatelstvo Ekonomika.
3. Bilorus, O., & Matseiko, Yu. (2002). Ми могли б бути серед лідерів [My mohly b buty sered lideriv]. *Holos Ukrainy*, March 1, 6.
4. Dynkin, A. A. (Ed.) (2007). Мировая экономика: прогноз до 2020 года [*Mirovaya ekonomika: prognoz do 2020 goda*] (429 p.). Moscow: Mahistr.
5. Eurostat. Statistics Explained. Life expectancy at birth, 1980–2015 (2017). Retrieved from [http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Life\\_expectancy\\_at\\_birth,\\_1980-2015\\_\(years\).png](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Life_expectancy_at_birth,_1980-2015_(years).png)
6. Haidar, E. (2004). История пенсий [Istoriya pensiy]. Retrieved from [http://www.ng.ru/ideas/2004-07-13/10\\_histori.html](http://www.ng.ru/ideas/2004-07-13/10_histori.html)
7. Ivanova, E. I., & Sidornia, A. A. (2014). Мировой опыт развития пенсионных систем: общемировые тенденции и межстрановые различия [Mirovoy opyt razvitiya pensionnykh sistem: obshchemirovyye tendentsii i mezhranovyye razlichiya]. *Molodezhnyy nauchnyy forum: Obshchestvennyye i ekonomicheskiye nauki*. Retrieved from <https://nauchforum.ru/studconf/social/viii/2318>
8. Jacobs, K., Kohli, M., & Rein, M. (1991). Germany: the diversity of pathway. In M. Kohli, M. Rein, A.-M. Guillemard, & H. van Gunsteren (Eds.), *Time to retirement. Comparative studies of early exit from labor force* (pp. 181-221). Cambridge: Cambridge University Press.
9. Karachurina, L. (2009). Германия: как управлять мигрантами [Germanyia: kak upravlyat migrantami]. *Sovremennaya Yevropa*, 2, 18-33.
10. Kohli, M. (1986a). The world we forgot: a historical review of life course. In Marshall, (Ed.), *Late life. The social psychology of aging* (pp. 271-303). Beverly Hills: Sage.
11. Kohli, M. (1986b). Social Organisation and subjective construction of the life course. In A. B. Sorensen, F. E. Weinert, & L. R. Sherrod (Eds.), *Human development and the life course* (pp. 271-292). Hillsdale: Lawrence Erlbaum.
12. Kohli, M. (1987). Retirement and the moral economy: A historical interpretation of the German case. *Journal of Aging Studies*, 1(2), 125-144.
13. Kohli, M. (2007). The institutionalization of the life course: Looking back to look ahead. *Research in Human Development*, 4(3-4), 253-271.
14. Kohli, M., & Arza, C. (2011). The Political Economy of Pension Reform in Europe. In R. H. Binstock & L. K. George (Eds.), *Handbook of Aging and the Social Sciences* (pp. 251-264). New York: Elsevier.
15. Komp, K. (2017). Shifts in the realized retirement age: Europe in times of pension reform and economic crisis. Retrieved from <http://journals.sagepub.com/doi/abs/10.1177/0958928717709174>

16. Kotlikoff, L., & Burns, S. (2005). Пенсионная система перед бурей: то, что нужно знать каждому о финансовом будущем своей страны [Pensionnaya sistema pered burey: to, chto nuzhno znat kazhdomu o finansovom budushchem svoey strany] (348 p.). Translated from English. Moscow: Alpina Biznes Buks.
17. Kukuruz, H. (2016). Пенсійна реформа: реалії та виклики [Pensiina reforma: realii ta vyklyky]. Retrieved from <http://forbes.net.ua/opinions/1420021-pensionnaya-reforma-realii-i-vyzovy>
18. Kuvshynova, O. (2016). Как мир реформирует свои пенсионные системы [Kak mir reformiruyet svoi pensionnyye sistemy]. Retrieved from <https://www.vedomosti.ru/economics/articles/2016/12/23/670920-mir-reformiruet>
19. Meadows, D. H., Meadows, D. L., Randers, J., & William, W. Behrens III (1972). *The limits to growth. A Report for the Club of Rome's Project on the Predicament of Mankind* (211p.). New York: Universe Books.
20. Melbourne Mercer Global Index (2017). Australian Centre for Financial Studies. Retrieved from [https://www.globalpensionindex.com/wp-content/uploads/2017\\_MMGI\\_Report.pdf](https://www.globalpensionindex.com/wp-content/uploads/2017_MMGI_Report.pdf)
21. Natali, D. (2008). *Pensions in Europe. European Pensions: The Evolution of Pension Policy at National and Supranational Level* (290 p.). Peter Lang.
22. Natali, D. (2015). Pension Reform in Europe: What Has Happened in the Wake of the Crisis? *CESifo DICE Report*, 13(2), 31-35. Retrieved from <https://core.ac.uk/download/pdf/93376107.pdf>
23. Fox, L. (1998). Pension Reform in the Post-Communist Transition Economies. *Transforming Post-Communist Political Economies* (pp. 370-384). Washington, DC: The National Academies Press. Retrieved from <https://www.nap.edu/read/5852/chapter/20>
24. Ripra, M. V. (2007). Характеристика світових систем пенсійного забезпечення і страхування [Kharakterystyka svitovykh system pensiinoho zabezpechennia i strakhuvannia]. *Svit finansiv*, 1, 35-45.
25. Ripra, M. V. (2017). Досвід модернізації пенсійних систем в економічно розвинених країнах [Dosvid modernizatsii pensiinykh system v ekonomichno rozvynenykh krainakh]. *Ekonomichnyi Visnyk Universytetu. Zb. nauk. prats uchenykh ta aspirantiv*, 34(1), 301-307.
26. Tanzi, V., & Schuknecht, L. (2000). *Public Spending in the 20th Century. A Global Perspective*. Cambridge and New York: Cambridge University Press.
27. Tkachenko, L. (2016). Пенсии и социальное страхование в Украине: первоочередные задачи [Pensii i sotsyalnoye strakhovaniye v Ukraine: pervoocherednyye zadachi]. Retrieved from <https://zn.ua/finances/pensii-i-socialnoe-strahovanie-v-ukraine-pervoocherednye-zadachi-.html>
28. Tkachenko, L. (2017). Солидарная пенсионная система: о настоящих факторах неэффективности [Solidarnaya pensionnaya sistema: o nastoyashchikh faktorakh neeffektivnosti]. Retrieved from [https://zn.ua/macrolevel/solidarnaya-pensionnaya-sistema-o-nastoyaschih-faktorah-neeftivnosti-249570\\_html](https://zn.ua/macrolevel/solidarnaya-pensionnaya-sistema-o-nastoyaschih-faktorah-neeftivnosti-249570_html)
29. Tkachenko, L. (2017). Три всадника демографического апокалипсиса. Основные тренды в Украине [Tri vsadnika demograficheskogo apokalypsisa. Osnovnyye trendy v Ukraine]. Retrieved from [https://zn.ua/macrolevel/tri-vsadnika-demograficheskogo-apokalypsisa-osnovnyye-trendy-v-ukraine-265804\\_html](https://zn.ua/macrolevel/tri-vsadnika-demograficheskogo-apokalypsisa-osnovnyye-trendy-v-ukraine-265804_html)
30. Tserkasevich, L. V. (2002). Современные тенденции социальной политики в странах Европейского Союза [Sovremennyye tendentsii sotsialnoy politiki v stranakh Evropeyskogo Soyuz] (245 p.). St. Petersburg: SPb HЭУФ.
31. Tuladkhar, A., Pereyra, Zh., Muir, D., & Karam, F. (2011). Глобальная пенсионная реформа [Globalnaya pensionnaya reforma]. Retrieved from <http://www.mn.ru/newspaper/opinions/71478>
32. Whitehouse, E. (2007). Pension Panorama: Retirement-Income Systems in 53 Countries (234 p.). Washington, DC: The World Bank. Retrieved from <http://www.biomedsearch.com/article/Edward-Whitehouse-Pension-Panorama-Retirement/210033207.html>
33. Довічна праця [Dovichna pratsia] (2013). *Zakon i Biznes*, 50(1140). Retrieved from [http://zib.com.ua/ua/print/45870-angliya\\_zminyue\\_vik\\_vihodu\\_na\\_pensiyu.html](http://zib.com.ua/ua/print/45870-angliya_zminyue_vik_vihodu_na_pensiyu.html)